GOVERNMENT OF INDIA
POWER
LOK SABHA

STARRED QUESTION NO:333
ANSWERED ON:27.04.2012
RESEARCH AND DEVELOPMENT IN POWER SECTOR
Majhi Shri Pradeep Kumar;Reddy Shri Magunta Srinivasulu

Will the Minister of POWER be pleased to state:

(a) whether the loss of electricity during transmission and distribution tends to increase the cost of power;

(b) if so, the details thereof along with the quantum and percentage of power lost during the process;

(c) whether there is a need to strengthen research and development activities in power generation, transmission and distribution sectors in the country;

(d) if so, the details thereof; and

(e) the steps taken by the Government in this regard so far?

Answer

THE MINISTER OF POWER (SHRI SUSHILKUMAR SHINDE)

(a) to (e): A Statement is laid on the Table of the House.

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO. 333 TO BE ANSWERED IN THE LOK SABHA ON 27.04.2012 REGARDING RESEARCH AND DEVELOPMENT IN POWER SECTOR.

(a): Yes, Madam.

(b): Transmission & Distribution (T&D) losses are factored in by the Appropriate Regulatory Commission while determining the retail tariff for the consumers. During 2009-10, the overall T&D losses in the country were 25.39% as compared to 27.2% in 2007-08.

(c): Yes, Madam.

(d): Research & Development (R&D) is being promoted as an on-going activity in the power generation, transmission and distribution sectors. In the thermal generation sector, the thrust areas include ultra super critical and advanced ultra super critical plants, Integrated Gasified Combined Cycle (IGCC) technology, waste heat recovery system, etc.

In the hydro power generation the thrust areas include integrated operation of cascade hydro power plants, technological advancement in investigation of hydro projects and use of Geographical Information System (GIS)/Geo- positioning System (GPS), technology for split runners, solving silt erosion problems.

The thrust areas in transmission sector include Extra High Voltage (EHV) and Ultra High Voltage (UHV) AC and DC transmission systems, compact towers, application of high temperature Superconducting Technology in developing transformers and gas insulated sub-stations, field trial of 1200 kV Ultra High Voltage (UHV) AC Test Station, development of smart grid transmission and mobile substations for faster restoration of power supply.

In the distribution sector the focus is on smart grid and decentralized distributed generation.

(e): Government of India has constituted a Standing Committee on Research and Development in the Power Sector and has prepared a National Perspective Plan for Research & Development. The in-house R&D set-ups of major utilities address introduction and absorption of new technology by applied research primarily through project routes. Major manufacturers have their own R&D set-up, focusing on product development. Central Power Research Institute is provided with capital funds from the Ministry of Power for in-house research as well as funds to coordinate and manage these research schemes.